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/Catherine Witczak/ (01/31/2009)

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Patent**IN THE CLAIMS:**

This listing of claims replaces all prior versions and listings of claims in the application:

1-11. (canceled)

12. (currently amended) The method of claim 18 [[11]], wherein the sealing components are provided in the barrels by:

moving a valve coupled to the outlets of the barrels to a first position wherein the outlets communicate with containers comprising sealing components therein;
advancing the plunger assembly into the barrels to inject the sealing components in the barrels into the containers to mix the sealing components in the barrels with the sealing components in the containers; and
withdrawing the plunger assembly from the barrels to draw mixed sealing components from the containers into the barrels.

13. (original) The method of claim 12, wherein the sealing components in the barrels comprise one or more buffer solutions, and wherein the sealing components in the containers comprise solid polymer precursor components.

14. (original) The method of claim 13, further comprising shaking the containers to dissolve the polymer precursor components in the one or more buffer solutions.

15. (canceled)

16. (currently amended) The method of claim 18 [[11]], wherein the barrels are connected to the delivery sheath via a “Y” fitting that mixes the sealing components in the barrels together.

17. (currently amended) The method of claim 18 [[11]], further comprising: introducing an occlusion member into the puncture until an expandable member on the occlusion member is disposed within a body lumen communicating with the puncture; expanding the expandable member within the body lumen; and manipulating the expandable member to substantially seal the body lumen from the puncture before activating the actuator to inject the sealing components into the puncture.

18. (currently amended) A method for delivering a sealing compound from a delivery device comprising a pair of barrels including outlets and a plunger assembly slidable within the barrels from a first position to a second position for injecting components out of the barrels through the outlets, the method comprising:

providing sealing components in the barrels with the plunger assembly in the first position; activating an actuator coupled to a spring mechanism to release the spring mechanism, whereupon the spring mechanism directs the plunger assembly towards the second position to inject the sealing components out of the barrels;

introducing a delivery sheath into a puncture through tissue; and connecting the barrels to a lumen of the delivery sheath,

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wherein the actuator is activated after the delivery sheath is introduced into the puncture such that the sealing components are injected from the barrels through the lumen of the delivery sheath and into the puncture, and

wherein a retraction assembly is coupled to the delivery sheath ~~and the occlusion member~~, and wherein the plunger assembly triggers a release of the retraction assembly as the plunger assembly slides towards the second position, whereupon the retraction assembly automatically withdraws the delivery sheath at least partially from the puncture to fill at least a portion of the puncture with the sealing components.

19-28. (canceled)

29. (currently amended) The method of claim 32 [[25]], wherein the barrels are connected to the delivery sheath via a “Y” fitting that mixes the sealing components in the barrels together.

30. (currently amended) The method of claim 32 [[25]], further comprising withdrawing the delivery sheath at least partially from the puncture to fill at least a portion of the puncture with the sealing components.

31. (currently amended) The method of claim 32 [[25]], wherein the spring mechanism has a predetermined spring constant to ensure that the sealing compound is delivered in a desired time before the sealing components gel and cease to flow through the delivery sheath.

32. (previously amended) A method for sealing a puncture through tissue using a delivery device comprising a plurality of barrels including outlets and a plunger assembly slidable within the barrels from a first position to a second position for injecting components out of the barrels through the outlets, the barrels including sealing components therein with the plunger assembly in the first position, the method comprising:

introducing an occlusion member into the puncture until an expandable member on the occlusion member is disposed within a body lumen communicating with the puncture;

expanding the expandable member within the body lumen;

manipulating the expandable member to substantially seal the body lumen from the puncture;

introducing a delivery sheath into a puncture through tissue;

connecting the barrels to a lumen of the delivery sheath; and

activating an actuator coupled to a spring mechanism to release the spring mechanism, whereupon the spring mechanism automatically directs the plunger assembly towards the second position to inject the sealing components out of the barrels into the puncture at a substantially continuous rate,

wherein a retraction assembly is coupled to the delivery sheath and the occlusion member, and wherein the plunger assembly triggers a release of the retraction assembly as the plunger assembly slides towards the second position, whereupon the retraction assembly automatically withdraws the delivery sheath at least partially from the puncture to fill at least a portion of the puncture with the sealing components.

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33. (currently amended) A method for sealing a puncture through tissue using a delivery device comprising a plurality of barrels including outlets and a plunger assembly slidable within the barrels from a first position to a second position for injecting components out of the barrels through the outlets, the method comprising:

providing sealing components in the barrels with the plunger assembly in the first position; introducing a delivery sheath into a puncture through tissue; connecting the barrels to a lumen of the delivery sheath; and activating an actuator coupled to a spring mechanism to release the spring mechanism, whereupon the spring mechanism automatically directs the plunger assembly towards the second position to inject the sealing components out of the barrels into the puncture without pauses during delivery of the components out of the barrels and without requiring further activation of the actuator,

wherein a retraction assembly is coupled to the delivery sheath, and wherein the plunger assembly triggers a release of the retraction assembly as the plunger assembly slides towards the second position, whereupon the retraction assembly automatically withdraws the delivery sheath at least partially from the puncture to fill at least a portion of the puncture with the sealing components.

34. (previously presented) The method of claim 33, further comprising:
introducing an occlusion member into the puncture until an expandable member on the occlusion member is disposed within a body lumen communicating with the puncture;

expanding the expandable member within the body lumen; and
manipulating the expandable member to substantially seal the body lumen from the
puncture before activating the actuator to inject the sealing components into the puncture.

35. (previously amended) A method for sealing a puncture through tissue using a delivery device comprising a plurality of barrels including outlets and a plunger assembly slidable within the barrels from a first position to a second position for injecting components out of the barrels through the outlets, the barrels including sealing components therein with the plunger assembly in the first position, the method comprising:

introducing an occlusion member into the puncture until an expandable member on the occlusion member is disposed within a body lumen communicating with the puncture;

expanding the expandable member within the body lumen;

manipulating the expandable member to substantially seal the body lumen from the
puncture;

introducing a delivery sheath into a puncture through tissue;

connecting the barrels to a lumen of the delivery sheath; and

activating an actuator coupled to a spring mechanism to release the spring mechanism,
whereupon the spring mechanism automatically directs the plunger assembly towards the second
position to inject the sealing components out of the barrels into the puncture without pauses
during delivery of the components out of the barrels;

wherein a retraction assembly is coupled to the delivery sheath and the occlusion member,
and wherein the plunger assembly triggers a release of the retraction assembly as the plunger

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assembly slides towards the second position, whereupon the retraction assembly automatically withdraws the delivery sheath at least partially from the puncture to fill at least a portion of the puncture with the sealing components.

36. (previously presented) The method of claim 33, wherein the barrels are connected to the delivery sheath via a “Y” fitting that mixes the sealing components in the barrels together.

37. (previously presented) The method of claim 33, further comprising withdrawing the delivery sheath at least partially from the puncture to fill at least a portion of the puncture with the sealing components.

38. (previously presented) The method of claim 33, wherein the spring mechanism has a predetermined spring constant to ensure that the sealing compound is delivered in a desired time before the sealing components gel and cease to flow through the delivery sheath.